

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

## WHAT IS CLAIMED IS:

1. A  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or a salt thereof excluding U- $^{13}\text{C}$ -maltose,  $^{13}\text{C}$ -starch, 1- $^{13}\text{C}$ -maltotetraose and 1- $^{13}\text{C}$ -amylose.

2. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to claim 1, which is hydrolyzed with  $\alpha$ -amylase.

3. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to claim 2, which is not hydrolyzed with  $\alpha$ -glucosidase.

4. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to any one of claims 1 to 3, wherein at least one sugar molecule constituting the oligosaccharide or polysaccharide is  $^{13}\text{C}$ -labeled.

5. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to any one of claims 1 to 3, wherein at least one sugar molecule constituting the oligosaccharide or polysaccharide is modified with at least one  $^{13}\text{C}$ -labeled modifying group.

6. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to any one of claims 1 to 5, which is a linear or branched oligosaccharide or polysaccharide.

7. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to any one of claims 1 to 5, which is a cyclic oligosaccharide or

09589419 0000700

Sub a2

Sub A3  
Contd

polysaccharide.

8. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to claim 6, which is modified at the non-reducing terminal.

Sub A4  
9. The  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to claim 1, which is a  $^{13}\text{C}$ -cyclodextrin or  $\beta$ -galactosyl- $^{13}\text{C}$ -maltooligosaccharide.

Sub A3  
10. A derivative of the  $^{13}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof according to any one of claims 1 to 9.

11. A  $^{13}\text{C}$ -labeled inclusion complex or a salt thereof, which comprises a cyclodextrin or a modified derivative thereof as a host molecule.

12. The inclusion complex or salt thereof according to claim 11, wherein the host molecule is  $^{13}\text{C}$ -labeled.

13. The inclusion complex or salt thereof according to claim 11, wherein the guest molecule is  $^{13}\text{C}$ -labeled.

Sub A4  
14. The inclusion complex or salt thereof according to any one of claims 11 to 13, wherein the guest molecule is selected from the group consisting of oligosaccharides, amino acids, peptides, organic acids, fatty acids, fatty acid glycerides, vitamins, catechins, carotinoids, flavonoids and cholesterol.

42

15. The inclusion complex or salt thereof according to claim 14, wherein the guest molecule is selected from the group consisting of  $^{13}\text{C}$ -phenylalanine, benzoylphenylalanyl- $^{13}\text{C}$ -leucine and benzoylphenylalanyl- $^{13}\text{C}$ -leucine methyl ester.

16. A diagnostic agent for pancreatic exocrine function comprising a  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled oligosaccharide or polysaccharide or a salt thereof or a derivative thereof other than  $^{13}\text{C}$ -starch.

17. The diagnostic agent for pancreatic exocrine function according to claim 16, wherein the  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof or derivative thereof is hydrolyzed with  $\alpha$ -amylase.

18. The diagnostic agent for pancreatic exocrine function according to claim 17, wherein the  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled oligosaccharide or polysaccharide or salt thereof or derivative thereof is not hydrolyzed with  $\alpha$ -glucosidase.

19. The diagnostic agent for pancreatic exocrine function according to any one of claims 16 to 18, wherein the  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled oligosaccharide or polysaccharide is a linear or branched oligosaccharide or polysaccharide.

20. The diagnostic agent for pancreatic exocrine function according to claim 19, wherein the  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled oligosaccharide or polysaccharide is modified at the non-reducing terminal.

21. The diagnostic agent for pancreatic exocrine function according to any one of claims 16 to 18, wherein

but a5  
002090-67468560

the  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled oligosaccharide or polysaccharide is a cyclic oligosaccharide or polysaccharide.

22. A diagnostic agent for pancreatic exocrine function comprising a  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled inclusion complex or a salt thereof having a cyclodextrin or a modified derivative thereof as a host molecule.

23. The diagnostic agent for pancreatic exocrine function according to any one of claims 16 to 22, wherein the pancreatic exocrine function to be diagnosed is the ability of the pancreas to secrete  $\alpha$ -amylase.

24. The diagnostic agent for pancreatic exocrine function according to any one of claims 16 to 22, wherein the pancreatic exocrine function to be diagnosed is the ability of the pancreas to secrete  $\alpha$ -amylase and at least one pancreatic exocrine enzyme other than  $\alpha$ -amylase.

25. A  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled fluorescein ester compound or a salt thereof.

26. The compound or salt thereof according to claim 25, which is a compound or salt thereof resulting from a reaction of a  $^{13}\text{C}$ - or  $^{14}\text{C}$ -labeled acid with fluorescein at both or either of the two hydroxyl groups at 3' and 6' positions to form an ester linkage.

27. The compound or salt thereof according to claim 26, wherein the acid is a carboxylic acid.

28. The compound or salt thereof according to claim 27, wherein the carboxylic acid is a fatty acid.

29. The compound or salt thereof according to claim 28, wherein the fatty acid has 2 to 16 carbon atoms.

30. The compound or salt thereof according to claim 29,

002090" 5746560



according to any one of claims 32 to 37, wherein the  $^{13}\text{C}$ - or  $^{14}\text{C}$ -  
labeled fluorescein ester compound or pharmaceutically  
acceptable salt thereof is subjected to the action of the  
pancreatic exocrine cholesterol ester hydrolase and pancreatic  
exocrine esterase and decarboxylated to generate  $^{13}\text{CO}_2$  or  $^{14}\text{CO}_2$ .

002090" 6T468560

45  
46

39. A <sup>13</sup>C-labelled oligosaccharide or polysaccharide or salt thereof according to any one of claims 1 to 10 for use in a method of diagnosis.

40. An inclusion complex according to any of claims 11 to 15 for use in a method of diagnosis.

41. A  $^{13}\text{C}$  or  $^{14}\text{C}$ -labelled fluorescein ester compound or salt thereof according to any one of claims 25 to 31 for use in a method of diagnosis.

42. A compound according to any one of claims 39 to 41 wherein the diagnosis is the diagnosis of pancreatic exocrine function.

adly.

B5

46 yr